

**REMARKS****Summary of the Outstanding Rejections**

Claims 1, 2 and 5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Weale (U.S. Patent No. 6,049,470) (hereinafter "Weale") in view of Yamada et al. (U.S. Patent No. 6,768,516) (hereinafter "Yamada").

Claim 4 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Weale, Yamada, and in further view of Throngnumchai et al. (U.S. Patent No. 5,705,807) (hereinafter "Throngnumchai").

**Applicants' Technical Remarks and Traversal of the Rejections**

At page 3 of the Final Office Action, the Examiner concedes that Weale fails to teach particular features of independent claim 1 of the instant application regarding "the signal processing circuit is positioned at a planar portion of the package that differs from a planar portion at which the solid-state imaging element is positioned." However, the Examiner then applies Yamada as allegedly curing these deficiencies of Weale. However, Applicants respectfully traverse this combination of Weale and Yamada as being based on impermissible hindsight for at least the following reasons.

Applicants respectfully submit that neither of Weale and Yamada teach, or even suggest, "a heat generation in the load resistor deteriorates characteristics of the solid-state imaging element." Even further, Yamada does not teach, or even suggest, the utilization of a signal processing circuit including a load resistor. As a result, Applicants respectfully submit that a person having ordinary skill in the subject art would have no motivation to combine Weale and Yamada in order to prevent the deterioration of characteristics of the solid-state imaging element

due to the heat generation in the load resistor. Applicants respectfully submit that Weale and Yamada do not provide a reasonable prospect of success in preventing the deterioration of characteristics of the solid-state imaging element.

In this regard, MPEP § 2143.02 specifically states that a reasonable expectation is required in order to support a holding of obviousness. More particularly, this section of the MPEP directs that “[a] rationale to support a conclusion that a claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded nothing more than predictable results to one of ordinary skill in the art.” KSR International Co. v. Teleflex Inc., 127 S.Ct. 1727 (2007), 82 USPQ2d 1385, 1395 (2007).

Therefore, Applicants respectfully submit that a person having ordinary skill in the subject art would not look to combine Weale and Yamada in addressing the problems confronting the Applicants of the instant application. **If the Examiner intends to maintain the current rejections in the next Office Communication, the Examiner is respectfully requested to specifically explain on the record how Weale and Yamada would provide a reasonable prospect of success in preventing the deterioration of characteristics of the solid-state imaging element. As discussed previously, Applicants believe that these references do not provide such a reasonable prospect of success to any extent.**

Even further, Applicants note that Yamada also does not teach or suggest that “the load resistor and the output terminal of the solid-state imaging element are electrically connected via the bonding wire.” Instead, Yamada discloses that the image processing semiconductor 9 is disposed so as to cover the image pick-up semiconductor 4 and is flip-chip-bonded to the wiring

board 21. Applicants respectfully submit that because the image pick-up semiconductor 4 is covered by the image processing semiconductor 9, the image pick-up semiconductor 4 and the image processing semiconductor 9 cannot be electrically connected via the bonding wire to any extent. Accordingly, Applicants respectfully submit that a person having ordinary skill in the subject art could not combine the arrangement of Weale, which teaches and suggests wire-bonding, with the arrangement of Yamada, which is not able to realize wire-bonding.

In this regard, according to the directives of MPEP § 2143.01 V, “[i]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).” Similarly, according to the directives of MPEP § 2143.01 VI, “[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).”

**If the Examiner intends to maintain the current rejections in the next Office Communication, the Examiner is respectfully requested to specifically explain why each of the above-quoted portions of MPEP § 2143.01 V and VI do not apply in this instance.**

Accordingly, Applicants respectfully assert that the rejections under 35 U.S.C. § 103(a) should be withdrawn because Weale and Yamada, whether taken separately or combined, do not teach or suggest each feature of independent claims 1 or 2 of the instant application. As pointed out by MPEP § 2143.03, “[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art.” In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).”

Since the prior art does not disclose or suggest any of the combinations recited in Applicants' claims, and if anything appears to teach away from the current claim recitations, KSR International Co. v. Teleflex Inc., 127 S.Ct. 1727 (2007), 82 USPQ2d 1385, 1395 (2007), Applicants submit that such recited combinations would not have been obvious in view of the applied references of record, whether taken alone or combined in the manner suggested by the Examiner in the Office Action.

Furthermore, Applicants respectfully assert that the dependent claims 4-5 are allowable at least because of their dependence from independent claim 1 or 2, and the reasons discussed previously. Also, the additionally-applied reference to Throngnumchai, with regard to dependent claim 4, does not cure the deficiencies discussed previously with regard to Weale and Yamada.

### **CONCLUSION**

In view of the foregoing, Applicants respectfully request that the current rejections be withdrawn as the pending claims are in condition for allowance. Applicants respectfully request timely allowance of the pending claims. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative to expedite prosecution. A favorable action is awaited.

**EXCEPT** for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. § 1.16 and 1.17 which may be required, including

any required extension of time fees, or credit any overpayment to Deposit Account No. 50-0573.


This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

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